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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,855	07/31/2003	Peter G. Odell	115801	9083
27074	7590	02/18/2005		
OLIFF & BERRIDGE, PLC. P.O. BOX 19928 ALEXANDRIA, VA 22320			EXAMINER KEEHAN, CHRISTOPHER M	
			ART UNIT	PAPER NUMBER

1712

DATE MAILED: 02/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/630,855

Applicant(s)

ODELL ET AL.

Examiner

Christopher M. Keehan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 and 21-25 is/are rejected.
- 7) ☒ Claim(s) 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### ***Claim Rejections - 35 USC § 102***

Claims 1-6, 8-18, and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Puyenbroek (6,072,010). Regarding claims 1, 9, 10, Puyenbroek discloses a polyetherimide-b-polysiloxane block copolymer comprising etherimide blocks and siloxane blocks, wherein the copolymer contains more than 50% by weight of the polysiloxane blocks (col.6, line 26-col.7, line 2). It is clear from the formulae disclosed by Puyenbroek that b can be from about 1 to about 40, which can result in a copolymer that contains more than 50% by weight of the polysiloxane blocks.

Regarding claims 2, 5, and 12, Puyenbroek discloses etherimide blocks that satisfy the claimed formula (col.1, line 57-col.3, line 33).

Regarding claims 3, 6, and 13, Puyenbroek discloses siloxane blocks that satisfy the claimed formula (col.6, line 50-col.7, line 20).

Regarding claims 4, 8, and 11, Puyenbroek discloses a halogenated polyetherimide-b-polysiloxane block copolymer as claimed (as set forth above and the brominated structures at col.2, lines 40-54). It is clear from the formulae as set forth that they can be manipulated to contain at least 5% by weight halogen, more specifically in the range as instantly claimed.

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Regarding claims 14-18, Puyenbroek discloses an aromatic bis(ether anhydride) and organic diamine as claimed (col.4, line 15-col.5, line 33).

Regarding claim 24, Puyenbroek discloses additives selected from the group as claimed (col.9, lines10-14).

Claims 1-18, and 21-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Reitz et al. (2003/0057601). The examiner is relying on the priority date of the provisional application (60/285323, filed on April 19, 2001) for Reitz et al. Regarding claims 1, 4, 7, 9, and 10, Reitz et al. disclose discloses a polyetherimide-b-polysiloxane block copolymer comprising etherimide blocks (section 0028-0029) and siloxane blocks, wherein the copolymer contains more than 50% by weight of the polysiloxane blocks (section 0044-0045), line 2) and the instantly claimed amount of fluorine (claim 15) and at least a substrate and thereon a surface layer of the composition of Reitz et al. (section 0083). It is clear from the formulae disclosed by Reitz et al. that b can be from about 1 to about 200, which can result in a copolymer that contains more than 50% by weight of the polysiloxane blocks, and an amount of fluorine as claimed.

Regarding claims 2, 5, and 12, Reitz et al. disclose etherimide blocks that satisfy the claimed formula (sections 0024-0029).

Regarding claims 3, 6, and 13, Reitz et al. disclose siloxane blocks that satisfy the claimed formula (sections 0044-0045).

Regarding claims 4, 8, and 11, Reitz et al. disclose a halogenated polyetherimide-b-polysiloxane block copolymer as claimed (the brominated structures at

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section 0024 and as set forth in claim 1). It is clear from the formulae as set forth that they can be manipulated to contain at least 5% by weight halogen, more specifically in the range as instantly claimed.

Regarding claims 14-18, Reitz et al. disclose an aromatic bis(ether anhydride) and organic diamine as claimed (sections 0032-0037-).

Regarding claims 21-23, Reitz et al. disclose substrates as claimed (sections 0083-0085).

### ***Allowable Subject Matter***

Claim 20 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art of record does not appear to teach or disclose a member with the claimed coating layer thereon as claimed in a ballistic aerosol marking printing system.

### ***Response to Arguments***

Applicant's arguments filed 12/29/04 have been fully considered but they are not persuasive. To begin, applicant has argued that Puyenbroek does not teach or disclose that the block copolymer can include more than 50% by weight of polysiloxane blocks, based upon the value of b. The polysiloxane blocks can comprise up to 40 siloxane units, when b=40. Based on the formulae at col.6, lines 26-65, T can be an oxygen or an -O-Z-O- group, and M is selected from the structures at col.3, line 50-col.4, line 8)

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When T is an oxygen, M is any one of the structures, and  $b=40$ , then the polysiloxane clearly comprises more than 50% by weight when all of the diamine is siloxane diamine. Applicant has argued along the same reasoning as above concerning Reitz et al. The same basic reasoning applies concerning the formula of Reitz et al. The claimed polysiloxane weight percent of the copolymer can be achieved by the formulae of Reitz et al. Further, applicant has pointed out that the copolymer of Reitz et al. can comprise a siloxane content of up to 60% by weight. If one of ordinary skill in the art is able to "at once envisage" the specific compound within the generic chemical formula, the compound is anticipated. One of ordinary skill in the art must be able to draw the structural formula or write the name of each of the compounds included in the generic formula before any of the compounds can be "at once envisaged." One may look to the preferred embodiments to determine which compounds can be anticipated. *In re Petering*, 301 F.2d 676, 133 USPQ 275 (CCPA 1962). The formulae of these references can be consulted to achieve the instantly claimed siloxane percent weight.

Although Puyenbroek prefers a mixture of siloxane diamines with nonsiloxane diamines, one cannot ignore that Puyenbroek does not teach all of the diamine can be siloxane diamine (col.7, lines 5-7). (See MPEP 2123 Rejection Over Prior Art's Broad Disclosure Instead of Preferred Embodiments)

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Keehan whose telephone number is (571) 272-1087. The examiner can normally be reached on Monday-Friday, from 6:30 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher Keehan

February 9, 2005



DAVID J. BUTTNER  
PRIMARY EXAMINER

